

Federal Incentives for Cellulose to Ethanol

Cellulose Ethanol Workshop,
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History of Federal Support

- Executive Order 13134
- Biomass Research and Development Act of 2000
- Farm Bill Reauthorization 2002
- EPA Act 2005
- Advanced Energy Initiative 2006

DOE Office Of Science Basic Energy Research

- This is continuing solicitation
- Basic Energy Sciences - Part (d) Energy Biosciences
- Biological and Environmental Research Program - Part (a) Life Sciences Research
- \$400 million for FFY 2007

USDA National Research Initiative

- Continuing solicitation
- Supports fundamental, mission-linked, and integrated research
- Grants limited to \$1.5 million
- \$ 161 million in FFY 2007 (estimated)

Biomass Research Centers

- New Solicitation for FFY 2007
- Establishment of GTL Bioenergy Research Centers that develop novel biological solutions for the production of such fuels as cellulosic ethanol or hydrogen
- DOE intends to fund up to two research Centers.
- Each Center will be funded up to \$125M over 5 years

Plant Feedstock Genomics for Bioenergy

- New Solicitation FFY 2007
- Genomics-based research for the production of fuels such as ethanol or renewable chemical feedstocks.
- Up to \$3M will be available for multiple awards. Max award size: \$500,000

Development of Fermentive Organisms

- New in FFY 2007
- Must be willing and able to take the strains to a commercial scale and have a sound business strategy to license and market the organism.
- Applicant must identify its target high impact feedstock (one that is at sustainable quantities exceeding 100M tons per year)

Regional Perspectives Technology & Approach

- Primary NE feedstock are hardwoods and softwoods
- Geography dictates technology that accomadates smaller distributed plants
- Research should include impacts of hetrogenous feedstocks
- Competition is strong - regional cooperation can add strength to proposals
- Other biofuels should not be overlooked
- Balance research between intellectual property and the public domain

Some further Thoughts

- It is not clear where AEI initiatives are new or meet portions of EPA Act
- Thermo chemical technologies do not appear to be as well represented
- Title XV sec 1511 (d) Renewable Fuels Production Research and Development Grants (RFG states)